# memorandum

**Ohio Field Office** 

DATE:

DEC 2 1 2004

REPLY TO

ATTN OF: OH: Taylor

OH-0107-05

SUBJECT:

EXEMPTION FROM SAFETY SYSTEM OVERSIGHT REQUIREMENTS AT THE OHIO FIELD OFFICE

TO

Paul M. Golan, Acting Assistant Manager for Environmental Management, EM-1

I have reviewed the Federal Technical Capability Panel's requirements for Safety System Oversight (SSO) relative to the three major Ohio Field Office sites (e.g. Fernald Closure Project, Miamisburg Closure Project, and West Valley Demonstration Project). As you know, the Ohio Field Office is aggressively closing these sites, and the requirements for the SSOs at these projects do not appear to be warranted. As such, I request an exemption from the SSO requirements.

The Fernald Closure Project and the Miamisburg Closure Project are nearing completion, and do not currently have any active safety class (SS) or safety significant (SC) structures, systems or components (SSCs). I do not expect this situation to change, but if it does, I will evaluate my options at that time.

The West Valley Demonstration Project (WVDP) has no active SS or SC SSCs. While not as far along as the other closure projects, there are no plans for any new nuclear facilities at WVDP. The major activities at the WVDP focus on characterizing, repackaging and shipping low level and transuranic (TRU) waste; decontaminating and decommission the facilities; and storing the solidified high level waste. The project relies exclusively on passive features (i.e., shielded facilities) and administrative controls for protection of the workers and the public. These types of features do not warrant the need for SSO.

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Based upon the above, I do not intend to implement the SSO program for the Ohio Field Office. Attached for your review is an assessment of the adequacy of the project oversight at each of the three facilities. If you have any questions regarding this matter, please contact me at (513) 246-0019.

Robert F. Warther

Manager

cc: T. J. Jackson, OH/WVDP

M. Marks, OH/MCP

W. Taylor, OH/FCP

J. Arango, EM-3.2

F. Lockhart, RFFO

### West Valley Demonstration Project Safety System Oversight December 2004

**Project Status**: The 1980 West Valley Demonstration Project (WVDP) Act (Public Law 96-368) states that the Secretary of the Department of Energy (DOE) shall carry out a high level radioactive waste management demonstration project at the Western New York Nuclear Service Center (WNYNSC) in West Valley, New York, for the purpose of demonstrating solidification techniques which can be used for preparing high level radioactive waste (HLW) for disposal. The liquid HLW at the WVDP has been processed and vitrified into 275 canisters that are currently being maintained in on-site storage. The remaining actions to fulfill DOE's obligations under the WVDP Act are as follows:

- > Transport the HLW to a Federal repository for permanent disposal;
- Dispose of low level radioactive waste and transuranic waste produced by the solidification of the HLW under the project; and
- Decontaminate and decommission the tanks and other facilities at WVDP in which the HLW was stored, the facilities used in the solidification of the waste, and any material and hardware used in connection with the project.

The current plans for the next four years are as follows:

- > Continue interim storage of the canistered HLW in the Main Process Plant Building;
- Dispose of low level radioactive waste and transuranic waste produced by the solidification of the HLW under the project [including operation of the Remote Handled Waste Facility (RHWF)]; and
- > Remove of all facilities that are not required to support HLW interim storage.

The West Valley Demonstration Project (WVDP) has no safety class (SC) structure, systems or components (SSCs) and no active safety significant (SS) SSCs. There are no plans for any new nuclear facilities at WVDP. As described above, the major activities at the WVDP focus on characterizing, repackaging and shipping low level and transuranic (TRU) waste; decontaminating and decommission the facilities; and storing the solidified high level waste. The project relies exclusively on passive features (i.e., shielded facilities) and administrative controls for protection of the workers and the public. These types of features do not warrant the need for Safety System Oversight (SSO).

The WVDP has two qualified Facility Representatives who provide oversight for the entire site, and a federal Project Managers who has oversight of the contractor's system

engineers. Seven federal personnel, who are qualified under the Technical Qualification Program, support the federal Project Manager in contract oversight (programmatic and project management).

### PBS-13: Solid Waste Stabilization and Disposition:

The solid waste stabilization and disposition project at the WVDP involves the waste management activities required per the WVDP Act of 1980 associated with identifying disposition pathways and disposition of low level and transuranic waste produced as a result of high-level waste vitrification. When this project is complete, all the Project-generated low-level waste and transuranic waste will have been shipped off-site for disposal. This project is made up of four sub-projects; the Remote Handled Waste Facility, Waste Disposal, TRU Waste Program (WIPP Certification), and Sodium Bearing Wastewater.

The RHWF became operational in June 2004 and provides the capability to safely characterize, size reduce, package and prepare waste for off-site shipment and disposal. This facility is categorized as a Hazard Category 3 nuclear facility with an approved documented safety analysis. The RHWF has no SC SSCs and no active SS SSCs. Two qualified Facility Representatives (who are qualified for all site facilities), and two other federal personnel provide the oversight of conduct of operations and radiological safety.

Under the waste disposition sub-project, the project has safety shipped over 200,000 ft<sup>3</sup> of low-level waste for disposal. The method of shipping included both rail and highway transportation. The two qualified site Facility Representatives and two other federal personnel are responsible for overseeing the packaging, shipping and disposition of LLW.

In fall 2004, the liquid Sodium-Bearing Waste was stabilized and solidified into 17 containers. The facilities used for liquid Sodium-Bearing Waste are being deactivated.

## PBS-40: Nuclear Facility Decontamination and Decommissioning.

The decontamination and decommissioning (D&D) program at the West Valley Demonstration Project (WVDP) involves those activities required per the WVDP Act of 1980 to decontaminate and decommission (D&D) the facilities, tanks and hardware used in connection with the Project. To support D&D efforts, this program also involves those activities required to safely manage and maintain the site in compliance with federal and state statutes, as well as DOE orders and mandates.

Activities from 2005 through 2008 will include further decontaminating, demolishing and/or dismantling Project facilities in order to minimize site surveillance and maintenance requirements associated with maintaining the HLW canisters on-site.

The High Level Waste (HLW) canisters are currently stored in a cell in the former spent fuel reprocessing facility. They will remain safely configured in their current storage location until their final disposition to a federal repository.

The two qualified site Facility Representatives and three other federal personnel are responsible for overseeing facility decontamination.

### PBS-20: Safeguards and Security

The Safeguards and Security Program at the WVDP includes those activities required to provide General Security, Physical Security, and Cyber Security for all project activities in accordance with applicable DOE standards and regulations. The WVDP safeguards and security program provides for a secure working environment during execution of the Project. This program is overseen by one federal personnel.

WVDP Federal Resources: Two qualified Facility Representatives, and one federal Project Manager (who is qualified under the Senior Technical Safety Managers program) provide Contractor oversight. Additionally, seven federal personnel who are qualified under the Technical Qualification Program (two who are qualified under Nuclear Safety) support the federal Project Manager in contract oversight.

#### Fernald Closure Project Safety System Oversight December 2004

Project Status: The Fernald Closure Project is in the final 18 months of existence as the Demolition and Dismantlement of the former production complex has been completed. Remaining structures, components and systems are support facilities such as warehouses and storage facilities for the remaining radiological waste material called 11e(2) by-product material. There are no safety or safety significant systems remaining at Fernald although there are three passive storage silos containing radium and thorium bearing wastes. Five qualified Facility Representatives provide oversight of the contractor's system engineers, three of whom are also in the EM sponsored Cadre program. Three Federal Project Managers provide additional oversight (programmatic and project management), two of whom are also in the EM sponsored Cadre program.

PBS-13: Solid Waste and Disposition: This project is made up of four sub-projects, the waste pits project which is 95% percent complete; the Silo 1 and 2 project, which is the project critical path, is 65% percent complete. This project is classified as a radiological system and has an approved documented safety analysis described in a Nuclear Health and Safety Plan. A qualified Facility Representative who is also a designated EM Cadre person provides the oversight of conduct of operations and radiological safety. A Federal Project Manager responsible for the packaging, shipping and disposition of the silo material provides program support. Another sub-project under this PBS is the Accelerated Waste Retrieval project that is currently deployed to remove 11e(2) waste from the silos to specially constructed tanks for interim storage prior to processing. This project is 96% complete with silo 1 completely empty and silo 2 10% empty and actively pumping. This project is expected to complete by February 2005. A full time Facility Representation (same person as Silo 1 & 2) is assigned to this project. The Silo 3 subproject is currently on operational stand-by awaiting resolution of the final waste disposition. A full time Facility Representative who is also a qualified EM Cadre is assigned to this project. The final sub-project under this PBS is the Waste Pits Project. This project is 95% complete with retrieval of all rafinate from the pits complete; the material has been dried and staged for shipping by rail to Envirocare in Utah. This project has two Federal managers providing oversight, a Federal Project Manager and a Facility Representative.

PBS-30: Soil and Water Treatment: This project is 75% complete with active excavation of the soils under the former production area in progress. Soil is removed from the production area and either loaded into an on site disposal facility or sent to Envirocare if the material is considered above the waste acceptance criteria established for the on site disposal facility. A full time Facility Representative who is also classified as an EM Cadre person provides DOE oversight for this project. The water treatment project is a pump and treat of groundwater designed to remove uranium from the groundwater directly under the former production area and a plum south of the site. A full time Facility Representative is assigned to provide conduct of operations and radiological safety oversight of the contractor's performance of this work.

PBS-50: Non-Nuclear Facility D&D: This project is 52% complete with focus on the D&D of trailers, parking lots, warehousing and other support structures. The majority of the remaining work in this PBS is the D&D of the three silos and the associated treatment facilities once the silo waste is packaged and sent off site for disposal. A full time Facility Representative is assigned oversight responsibilities for this PBS element.

Fernald Federal Resources: Five qualified Facility Representatives, two Federal Project Managers and three senior managers who are qualified under the Senior Technical Safety Managers program provide Contractor oversight. Five of these individuals have been selected to participate in the EM Cadre program.

### Miamisburg Closure Project Safety System Oversight December 2004

Project Status: The Miamisburg Closure Project has less than 2 years to completion. The project consists of demolishing the majority of the buildings and transferring a few of the buildings to the new site owner, the Miamisburg Mound Community Improvement Corporation (MMCIC); remediation of radiological and organic compound contaminated soils areas; and shipping the contaminated building debris and soils to off site disposal facilities. With the exception of one building (T Building), all rad contaminated buildings will be demolished by third quarter FY2005. The remaining building (T Building) is nearing decommissioning completion and will be ready to transfer to the MMCIC by the end of FY 2005. There are three fully qualified Facility Representatives at the site with one Facility Representative solely assigned to the tritium facility complex to provide direct oversight of T Building decommissioning and remaining safety systems. One MCP project manager also provides the overall project management oversight of the building activities.

PBS-13: Solid Waste Stabilization and Disposition: This project is 57% complete based on the baseline, however, contaminated soil volumes are higher than estimated, therefore, more contaminated Low Level Waste (LLW) will be shipped than planned. This project consists of packaging, transporting and disposing the various types of waste streams that are generated at Mound. The majority of waste is low level waste that is shipped to Envirocare, Utah in rail cars. One Facility Representative oversees the various waste packing operations on the site.

PBS-30: Soil and Water Remediation: This project is 59% complete. The main focus is to excavate rad and VOC contaminated soils for off site disposal and submit documentation to the regulator agencies to seek approval that these areas meet the site's clean-up criteria. A pump and treat operation for ground water is designed to remove VOC's from the ground water. VOC's in the ground water was the driver for the site to be placed on the National Priorities List (NPL). One Facility Representative provides the oversight for these operations.

PBS-40: Nuclear Facility D&D: This project is 86% complete. The completion of the T Building decommissioning activities is nearing completion. Currently the demantlement of the Tritium Emissions Reduction Facility (TERF) is the main focus. TERF inventories have been reduced to a point where controls are no longer needed and fire protection controls have been reduced to defense-in-depth only. A portion of T Building is undergoing final verification for regulator review and later transfer to the Miamisburg Mound Community Improvement Corporation. For many of the other rad/nuclear buildings, the structures are demolished or nearing demolishment with only slabs and foundations to be removed with soil excavation activities. One Facility Representative is assigned full time for decommissioning and demolishment activities.

Miamisburg Federal Resources: Three fully qualified Facility Representatives, two DOE/MCP Project Managers and two managers qualified under the Senior Technical Safety Managers standard provide oversight of the contractor clean-up activities at the Mound Site.